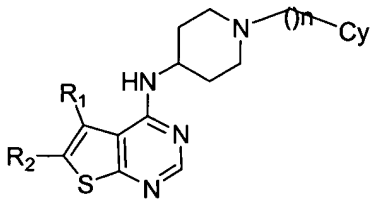
C. Amendments to the Claims

Please amend the claims where indicated:

1. (original) A compound having the formula



(I)

wherein

- R_1 and R_2 are independently hydrogen; lower alkyl; C_1-C_6 cycloalkyl or cycloheteroalkyl; halogen or halo-substituted alkyl; or R_1 and R_2, taken together, form a C_5-C_7 cycloalkyl or cycloheteroalkyl ring;
- Cy is a single or conjugated substituted or unsubstituted alicyclic or aromatic ring structure; and
- n is 0, 1, 2, 3, 4 or 5; and pharmaceutically acceptable salts and/or esters thereof.

2. (original) The compound of claim 1, wherein R_1 and R_2, taken together, form a C_5-C_7 cycloalkyl or cycloheteroalkyl ring.

3. (original) The compound of claim 2, wherein R_1 and R_2, taken together, form a cyclohexyl ring.

4. (original) The compound of claim 1, wherein n is 0, 1, 2 or 3.

5. (original) The compound of claim 1, wherein said lower alkyl is C_1-C_5 alkyl.

6. (original) The compound of claim 1, wherein said compound is a 5-HT receptor antagonist.

7. (original) The compound of claim 6, wherein said compound is a 5-HT_2 receptor antagonist.

8. (original) The compound of claim 7, wherein said compound is a 5-$HT_{2A, B \text{ or } C}$ receptor antagonist.

9. (original) The compound of claim 7, wherein said compound is a 5-HT_{2B} receptor antagonist.

10. (original) The compound of claim 1, wherein said compound is [1-(2-Fluoro-benzyl)-piperidin-4-yl]-(5,6,7,8-tetrahydro-benzo[4,5]thieno[2,3-d]pyrimidin-4-yl)-amine.

11. (original) The compound of claim 1, wherein said compound is [1-(3-Fluoro-benzyl)-piperidin-4-yl]-(5,6,7,8-tetrahydro-benzo[4,5]thieno[2,3-d]pyrimidin-4-yl)-amine.

12. (original) The compound of claim 1, wherein said compound is [1-(4-Fluoro-benzyl)-piperidin-4-yl]-(5,6,7,8-tetrahydro-benzo[4,5]thieno[2,3-d]pyrimidin-4-yl)-amine.

13. (original) The compound of claim 1, wherein said compound is [1-(4-Methyl-benzyl)-piperidin-4-yl]-(5,6,7,8-tetrahydro-benzo[4,5]thieno[2,3-d]pyrimidin-4-yl)-amine.

14. (original) The compound of claim 1, wherein said compound is (1-Benzo[1,3]dioxol-5-ylmethyl-piperidin-4-yl)-(5,6,7,8-tetrahydro-benzo[4,5]thieno[2,3-d]pyrimidin-4-yl)-amine.

15. (original) The compound of claim 1, wherein said compound is (5,6,7,8-Tetrahydro-benzo[4,5]thieno[2,3-d]pyrimidin-4-yl)-[1-(4-trifluoromethyl-benzyl)-piperidin-4-yl]-amine.

16. (original) The compound of claim 1, wherein said compound is (1-Benzhydryl-piperidin-4-yl)-(5,6,7,8-tetrahydro-benzo[4,5]thieno[2,3-d]pyrimidin-4-yl)-amine.

17. (original) The compound of claim 1, wherein said compound is (1-Naphthalen-2-ylmethyl-piperidin-4-yl)-(5,6,7,8-tetrahydro-benzo[4,5]thieno[2,3-d]pyrimidin-4-yl)-amine.

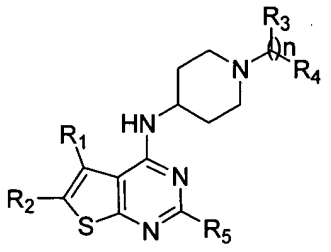
18. (original) The compound of claim 1, wherein said compound is (1-Phenethyl-piperidin-4-yl)-(5,6,7,8-tetrahydro-benzo[4,5]thieno[2,3-d]pyrimidin-4-yl)-amine.

19. (original) The compound of claim 1, wherein said compound is [1-(3-Phenyl-propyl)-piperidin-4-yl]-(5,6,7,8-tetrahydro-benzo[4,5]thieno[2,3-d]pyrimidin-4-yl)-amine.

20. (original) The compound of claim 1, wherein said compound is (5,6,7,8-Tetrahydro-benzo[4,5]thieno[2,3-d]pyrimidin-4-yl)-[1-(4-trifluoromethoxy-benzyl)-piperidin-4-yl]-amine.

21. (original) The compound of claim 1, wherein said compound is [1-(4-Methoxy-benzyl)-piperidin-4-yl]-(5,6,7,8-tetrahydro-benzo[4,5]thieno[2,3-d]pyrimidin-4-yl)-amine.

22. (original) A compound having the formula



(I)

wherein

- R_1 and R_2 are independently be hydrogen; lower alkyl, C_1-C_6 cycloalkyl or cycloheteroalkyl; halogens or halo-substituted alkyl; or R_1 and R_2, taken together, form a C_5-C_7 cycloalkyl or cycloheteroalkyl ring;
- R_3 and R_4 are independently Ar which is a single or conjugated substituted or unsubstituted aromatic ring structure;
- R_5 is H, (C_1-C_5)alkyl, (C_1-C_6)cycloalkyl, halogen substituted alkyl, NH_2, NHMe, NMe_2, NHEt, $NH(Et)_2$, NH(Pr), $N(Pr)_2$; and
- n is 0, 1, 2, 3, 4 or 5; and pharmaceutically acceptable salts and/or esters thereof.

23-32. (canceled)